

WHAT IS CLAIMED IS:

1. A chip impeder comprising:
a body including a mixture of ferrite powder and a resin; and
at least one coil electrode provided in the body; wherein
a cross point of the impedance in the frequency-impedance characteristic is
within the range of 1 about GHz or greater.
2. A chip impeder according to claim 1, wherein the ferrite comprises at least
one member selected from the group consisting of hexagonal ferrites, Zn₂Y type
ferrites, Co₂Y type ferrites, Co₂Z type ferrites, Ni ferrites, and NiCo ferrites.
3. A chip impeder according to claim 1, wherein the resin comprises at least one
member selected from the group consisting of polyetheretherketone, syndiotactic
polystyrene, polyimide, polybenzoxazine, and polybisallylnadiimide
4. A chip impeder according to claim 1, wherein the body has one of a
hexagonal or columnar shape.
5. A chip impeder according to claim 1, wherein the at least one coil electrode is
made of one of a conductive metal and a conductive adhesive.
6. A chip impeder according to claim 1, wherein a center axis of the at least one
coil electrode and an axis of the body are substantially parallel to each other.
7. A chip impeder according to claim 1, further comprising external electrodes
provided on two sides of the body.
8. A chip impeder according to claim 1, wherein the body includes first and
second lamination sheets made of the mixture of ferrite powder and resin and being
stacked on each other.
9. A chip impeder according to claim 1, wherein the resin is a thermosetting

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resin having a glass transition temperature T_g of about 162°C or higher.

10. A chip impeder according to claim 1, wherein the resin is a thermoplastic resin having a heat distortion temperature of about 273°C or higher.

11. A chip impeder according to claim 1, wherein a particle size of the ferrite powder is preferably in the range of about 0.05 μm to about 10 μm .

12. A method of manufacturing a chip impeder comprising the steps of:
forming a body including a mixture of ferrite powder and a resin; and
disposing at least one coil electrode in the body; wherein
a cross point of the impedance in the frequency-impedance characteristic is
within the range of 1 about GHz or greater.

13. The method according to claim 12, wherein the ferrite comprises at least one member selected from the group consisting of hexagonal ferrites, Zn_2Y type ferrites, Co_2Y type ferrites, Co_2Z type ferrites, Ni ferrites, and NiCo ferrites.

14. The method according to claim 12, wherein the resin comprises at least one member selected from the group consisting of polyetheretherketone, syndiotactic polystyrene, polyimide, polybenzoxazine, and polybisallylnadiimide

15. The method according to claim 12, wherein the body has one of a hexagonal or columnar shape.

16. The method according to claim 12, wherein the at least one coil electrode is made of one of a conductive metal and a conductive adhesive.

17. The method according to claim 12, wherein a center axis of the at least one coil electrode and an axis of the body are substantially parallel to each other.

18. The method according to claim 12, further comprising the step of forming external electrodes on two sides of the body.

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19. The method according to claim 12, wherein the step of forming the body includes forming first and second lamination sheets of the mixture of ferrite powder and resin and laminating the first and second lamination sheets on each other.

20. The method according to claim 12, wherein the resin is a thermosetting resin having a glass transition temperature T_g of about 162°C or higher.

21. The method according to claim 12, wherein the resin is a thermoplastic resin having a heat distortion temperature of about 273°C or higher.

22. The method according to claim 12, wherein a particle size of the ferrite powder is preferably in the range of about 0.05 μm to about 10 μm .

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